

WORK AT KALENDERHANE CAMII IN ISTANBUL: THIRD AND FOURTH PRELIMINARY REPORTS

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THIRD REPORT

A third season of work at Kalenderhane Camii in Istanbul was carried out under the auspices of Dumbarton Oaks and the Department of the History of Architecture, Istanbul Technical University.¹ The main 1968 season began June 1 and lasted fourteen weeks. Thereafter, conservation work on the building continued with reduced staff until mid-October. The aim of this season was to pursue further the general objectives of the project as stated in our first two preliminary reports.²

On the existing building, the exterior of the main dome and drum were laid free of later accretions, exposing substantial evidence for their original form. Repair and repointing were brought here to an advanced stage of completion. Within the building, the north and south crossarms and the bema were laid free of plaster, and, where necessary,

repair and repointing work was carried out. Work continued in these areas on the cleaning and securing of the marble revetment.

Excavation continued to the north of the building between it and the Valens Aqueduct, and several trenches were opened to the south of the building immediately flanking the south façade. Toward the end of the season, preliminary soundings were made in the interior in the bema floor.

EXCAVATION ON THE EXTERIOR

Due to the confined nature of the site, excavation proceeded slowly in the area between the building and the Valens Aqueduct. Four new trenches were opened in the western part of the site (A-D/4, in fig. A), digging was continued in the remaining trenches outside the north aisle wall, and the removal of baulks was begun. Although considerable information relating to the history of the site was gleaned in the course of this, no new structures of significance were uncovered, nor did the new evidence allow for substantial revision of our analysis of structures exposed in the 1967 season.

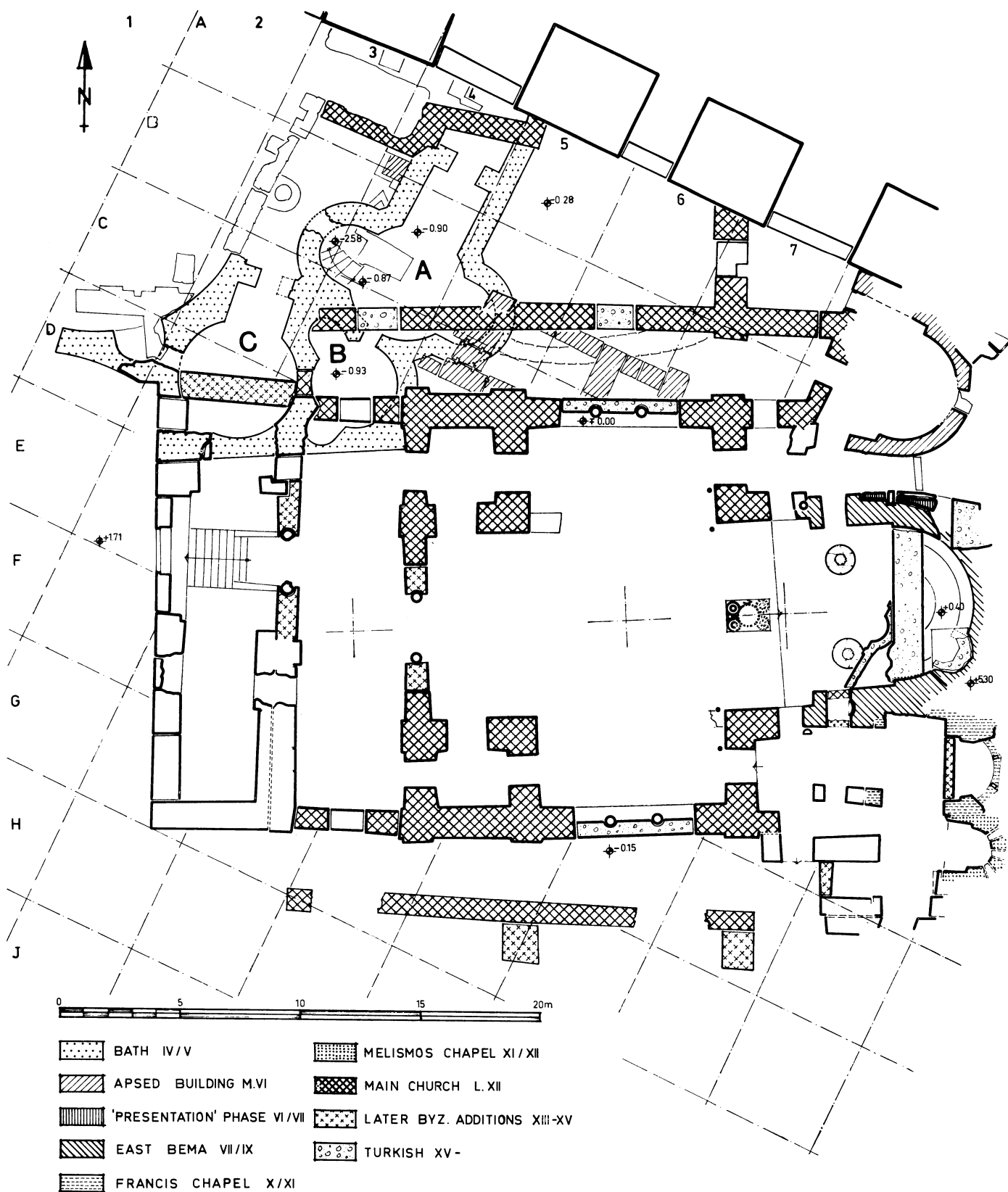
One piece of evidence relating to the date of the Main Church phase is worth noting. A sounding in C/4 beneath the undisturbed mortar bed of the north aisle paving yielded pottery fragments no later than the twelfth century in date. Since this paving can be demonstrated to belong to the Main Church phase, this is the first clear evidence which we have for its date: twelfth century or later.

In anticipation of excavation, preliminary clearing was undertaken along the south flank of the building. The exterior stairs which once led up to the minaret staircase (Second Report, fig. 1) were dismantled, and a modern retaining wall flanking the naos and esonarthex to the south was removed. In

¹ It is our pleasure to extend our thanks again to those who have facilitated our work: to the General Directorate of Vakıflar, the Department of Antiquities and the Municipality of Istanbul for their permission to continue the project; to Mr. Necati Dolunay, Director, and Dr. Nezi̇h Fıratlı, Curator, Istanbul Archaeological Museum, for numerous courtesies; to Mr. Ernest J. W. Hawkins, who served in the capacity of consultant and conservator of frescoes and mosaics; and to Dr. John Hayes for advice on pottery questions.

Our staff this year included A. Alpöge and B. Aran (supervising assistants), O. Bıçakçı, H. Çakır, K. Gökbayrak, and T. Özbek (architects), A. Sabuncu (pottery specialist), M. Akbaş, G. Başağası, and C. Soyhan (pottery assistants), A. Hutter, I. Köse, and A. Pfeifferberger (archaeologists), U. Striker (cataloger), E. Emiroğlu (photographer), and T. Ergil (Museum's representative).

² Cf. our prior reports, "First Preliminary Report," *DOP*, 21 (1967), 267-71, and "Second Preliminary Report," *DOP*, 22 (1968), 185-93, referred to herein respectively as First Report and Second Report.



A. Kalenderhane Camii. Plan of Building and Excavation, 1969

G/6-7 and F/8-9 trial trenches were opened in order to verify, if possible, the existence of a south aisle wall corresponding to the north aisle wall laid free in the second season.

This area showed evidence of considerable disturbance during the Turkish period resulting from the construction of drainage canals along the south flank of the building. Nevertheless, remains of the south aisle were exposed in G/6 and F/9; these bore traces of the same type of frescoed dado decoration as the north aisle.

In G/6 a large fragment of fallen fresco was discovered with the representation of the head of a sleeping apostle, possibly from a Gethsemane scene (fig. 1). Analysis of the stratigraphic context in which it was found is still inconclusive, but a provisional date in the thirteenth century may be suggested for it on the basis of its style. Originally it must have formed part of the programmatic decoration or the aisle walls above the frescoed dado.

THE DRUM AND DOME

At the commencement of our work the masonry of the exterior of the drum and dome was totally obscured. The outer surface of the dome was covered with a mortar slip overlaid with a thin earth and straw cushion for the lead which formerly covered the dome. The drum was encased in a heavy layer of modern cement, imparting a regular, cylindrical aspect to its exterior (Second Report, fig. 1). The removal of these later accretions revealed the essential features of the underlying structure (fig. 2).

The drum consists of sixteen piers with flat exterior faces, rising directly from the drum base and giving rise in turn to window arches, also with flat exterior faces and double reveals. The system, in other words, is not a regular cylinder, but rather two superimposed sixteen-sided polygons, with clear articulation at the springing of the window arches. The windows extend to the drum base, their lower part having been filled in recent times. Above the window arches and spandrels runs an undulating eaves line, which had also been suppressed by the cement encasement.

Although the drum is damaged, especially on its north side, what remains is of homogeneous construction, with close similarity to the construction of the Main Church phase.

Added to this, the discovery of traces of fresco remains in the window soffits leads us to suggest that the drum is Byzantine, possibly belonging to the Main Church phase.

THE BEMA INTERIOR

As cleaning and conservation work continued inside the naos, a scaffold was erected to the full height of the bema interior. Our ability to investigate this area was facilitated by the almost total absence of original marble revetment surviving in the east bema, thereby allowing for exposure of large areas of masonry.

The east bema was already recognized in the second season to represent a phase of construction distinct from and earlier than that of the Main Church. This observation was confirmed further by the great difference in its masonry. Here, in contrast to the irregular construction of the Main Church, the construction is in regular alternating bands of brick and ashlar (fig. 3). Pointing is distinctive with concave horizontal and impressed vertical joints, and random picking done by a sharp tool.

The work of prior seasons had exposed, virtually intact, the two Byzantine cornices running around the interior of the naos and terminating the revetment systems of the ground storey and gallery zones. This consists of simple, undecorated bevelled stringcourses, which had been completely hidden by heavy Turkish plaster cornices.

The cleaning of the east bema revealed that at the points at which the Main Church butts the east bema, the upper cornice changes from this simple stringcourse to a heavy molded cornice, summarily carved with tongue-and-dart decoration, and intact on both sides of the bema (fig. 3). The cornices may be spolia, but the fact that the carving turns the corner at both western ends suggests that they may have been fashioned for their present use and are original. This type of cornice is so commonplace in Early Byzantine architecture that it is of little use as an index of date.

At the eastern ends of these tongue-and-dart cornices soundings were made in the Turkish closing wall of the bema, exposing the beginning of the turning of the main apse. Here yet another cornice was revealed which originally must have decorated the main apse

(fig. 4). Although badly damaged, it bears the repeated motif of woven baskets giving rise to laurel swags, finely carved in deep relief against a low field of grape leaves. The cornice is reused, since its western ends are decorated with crude crossed palmettes, doubtless carved at the time the cornice was reset in its present position.

SOUNDING IN THE BEMA FLOOR

At the beginning of our work the bema was set off from the naos by a step (0.48 m. high) spanning the full distance between the western faces of the main eastern piers. Beyond this, to the east, the floor of the bema extended unbroken to the Turkish closing wall, paved with large, tightly joined marble slabs. Its only distinctive features were the spolia disc and frieze set into the floor at its eastern end, described in the First Report. Toward the end of the season, the raising of the pavement was begun in anticipation of exploration in the bema area.

One large marble slab in the western part of the bema, when disengaged and turned over, proved to be an altar mensa (fig. 5). The mensa measures 1.06 by 2.03 m. and at its edge 0.17 m. thick. Its edge is worked with a simple molding, subsequently shaved off at the bottom in connection with its reuse as a paving slab. On the top of the mensa a raised flat frame encloses a recessed field. The surface

of the frame and edge molding is smoothly finished, whereas that of the recessed field is only roughly worked. In the center of the field is a roughly cut, rectangular recession, measuring 0.21 by 0.35 m. and 0.05 m. in depth, to all appearances a reliquary grave.³ Traces of plaster setting survive in the recession. The bottom surface of the mensa bears the setting holes for legs, subsequently plugged in connection with its reuse.

Discussion of the original form and reconstruction of the altar must await the further study of comparative examples, but the question may be raised here whether the rough surface of the inner field may not be explained by the fact that the recessed area was originally filled with ornamental inlay. This would also explain the rough, unfinished quality of the reliquary grave, which, if this were the case, would have been left with the expectation that the visible surface of the mensa stone would be enclosed in a finished enframingent.

Finally, it should be noted that the latest pottery fragments recovered thus far from the superficial fill directly under the bema pavement date from the late fifteenth or early sixteenth century. This fact, plus the presence here of the reused altar mensa, suggests that the latest phase of the bema paving is that which was laid immediately following the transformation of the church into a mosque.

FOURTH REPORT

A fourth season of archaeological investigation and restoration was carried out in summer and autumn 1969 at Kalenderhane Camii in Istanbul, as in the past under the

joint auspices of Dumbarton Oaks and the Department of the History of Architecture, Istanbul Technical University.⁴ The season began June 9 and lasted sixteen weeks. Following this, work continued on a limited

³ The existence of a reliquary grave in a Byzantine altar mensa is not easily explained, since both J. Braun, *Der christliche Altar* (Munich, 1924), I, 648, and K. Wessel, s.v. "Altar," *Reallexikon zur byzantinische Kunst* (Stuttgart, 1966), I, col. 119, assert that mensa reliquary graves are never to be found in the Eastern church. If this is true, the questions may be raised whether an existing mensa might not have been modified for Latin use during the known Latin occupation of the building, or whether this mensa may not date from the period of the Latin occupation. Regardless, the context of its discovery suggests that it was in use during the Palaeologan period.

⁴ We record once again our sincere thanks for various courtesies, advice, and assistance to the General Directorate of Vakıflar, the Department of Antiquities, the Municipality of Istanbul, and to Mr. Necati Dolunay, Dr. Nezihe Fıratlı, Mr. Ernest J. W. Hawkins, and Dr. John Hayes.

Our staff this year included O. Bıçakçı (supervising assistant), H. Bozkurt, A. Erol, and K. Kuzucular (architects), A. Sabuncu (pottery specialist), G. Başağası, I. Dolar, Y. Toker, and S. Yum (pottery assistants), A. Aran, I. Köse, S. Şişmanoğlu, C. Soyhan, and P. Zorides (archaeologists), U. Striker (cataloger), and E. Emiroğlu (photographer).

scale throughout the winter and spring 1969–70.

Work this season concentrated on conservation of standing structure and preparation of the restoration project, on completion of the architectural survey, and on excavation and sounding within and around the building.

In particular, the excavation of the area between the existing building and the Valens Aqueduct was brought to an advanced stage of completion; and this, together with extensive additional soundings within the building, yielded significant new evidence for the understanding of the building and its related site.

Rather than describe our findings according to their location on the site, as we have in past reports,⁵ we have generally organized this report according to the chronology of principal phases on the site. While this reverses the sequence of discovery in excavation, we feel that the resulting account is clearer.

LATE ROMAN BATH

Portions of this complex, not identified as such, were exposed in prior seasons, partly incorporated in the fabric of the northern part of the two narthexes and partly projecting beyond the existing building to the north.⁶ Further excavation to the north of the existing building has laid free a complex consisting, thus far, of three rooms in varying state of preservation (figs. A and 6). The largest of these rooms, Room A, is situated at right-angle axis to the Valens Aqueduct and consists of a rectangular forechamber (fig. 7) opened by a door at the north, and a larger trefoil chamber to the south. Room B, which flanks it to the south, is a circular chamber, 3.75 m. in diameter, opened by two semicircular niches to the west which in turn flank a door communicating to Room C. Room C, already described in the Second Report, is a circular chamber, 5.00 m. in diameter, with a rectangular niche to the

north opened by a door. Distinctive features of this structure are its fine all-brick masonry and its precision of design.

A brick tile floor is preserved in much of Room A and is intact in Room B (fig. 8), where it is provided with radial water channels communicating with the flanking rooms and running out of the semicircular niches. A duct also connects the northwest niche of Room B with the area outside the door of Room C at a height of one meter above the tile floor.

Although no remains of hypocaust were found, indirect evidence indicates the preserved floors of Rooms B and C, and probably A, to have been the floor of a hypocaust, the original floor of the bath having been carried approximately one meter above it. This can be deduced from the presence of the channels in the floor of Room B and from the fact that the reveals of the door connecting Rooms B and C extend down only to a level of one meter above the preserved tile floor (fig. 9). Below this the passage narrows and is provided with ducts: a sub-floor system, in other words. The presence of predominantly sixth-century pottery fragments in the fill immediately overlying the tile floor suggests that the *suspensurae*, which may be presumed once to have carried the floor, had already been robbed by this date.

Northwest of Room C a segmental wall opened by a semicircular niche in D/2 suggests the original presence here of a large room or hemicycle (estimated diameter 12.5 m.). The complex continues to the west, and possibly to the north, beyond the confines of the excavation site, indicating the excavated rooms to be only part of a larger complex.

Secure confining dates for the construction of the bath are, at this stage of the investigation, widely spaced. That it is later than the Valens Aqueduct (A.D. 368) is probable, since it is situated on higher ground than the stylobate of the aqueduct, it takes the axis of the aqueduct into account in its siting, and it may be presumed to have drawn its water from it. But the earliest secure *terminus ante quem* for its construction, its partial suppression by the sixth-century apsed building described below, is of little interest. A preliminary study of pottery from limited soundings

⁵ Cf. our prior reports, "First Preliminary Report," *DOP*, 21 (1967), 267–71; "Second Preliminary Report," *DOP*, 22 (1968), 185–93; and "Third Preliminary Report," *DOP*, 25 (1971), 251–53, referred to herein respectively as First, Second, and Third Reports.

⁶ In particular "Small Rotunda," Second Report; designated "Room C" in this Report.

suggests a date of construction in the late fourth or early fifth centuries.⁷

APSED BUILDING

As with the bath, isolated parts of this structure were exposed in previous seasons, their coherence becoming evident only upon further excavation. The remains of this building (fig. A) lie on an axis parallel to the Valens Aqueduct and consist of a semicircular apse, 4.80 m. in interior diameter, of brick construction with greenstone chains, which flanks the prothesis to the north; and a longitudinal extension to the west preserved, for the most part, only in foundation blocks.

The rising wall of the apse, which now forms the eastern part of the north prothesis wall, was partially exposed along its outside circumference by penetrating the east closing wall of the prothesis and tunneling along its exterior perimeter to the point where it joins the Valens Aqueduct. The exterior ground level here is more than five meters higher than the interior, thereby limiting, for the time being, the scope of investigation. Excavation in the interior of the apse was limited by similar obstacles, since the earth which fills it provides partial support for a late Turkish vaulted structure above. This must be adequately underpinned before excavation can continue.

The longitudinal extension of the building to the west, in the form of large foundation blocks, was exposed, in B/5-7 and C/5, directly underlying the paving mortar bed of the excavated north aisle (fig. 10). The blocks, roughly squared, are set in two rows, parallel to the axis of the aqueduct, with three transverse connections. In B-C/5 they were joined with dovetail cramps. In this same zone the blocks rest directly on the dismantled and levelled wall of the eastern lobe of Room A of the bath, thereby fixing, as mentioned above, the construction of the apsed building

⁷ Without elaborating on the complicated topographical problems involved, the speculation may be briefly raised whether the bath may not be identified with the Carosianae, the bath built by Valens in 375, located by the *Notitia* in the seventh region of the city. Cf. R. Janin, *Constantinople byzantine* (Paris, 1950), 59-60 and 212. Further pursuit of this speculation must rest upon a more secure date for the bath than is presently available.

as the *terminus ante quem* for the destruction of this room.

Two fragments of rising brick wall can, in all probability, also be assigned to the longitudinal western extension of the apsed building. One, in the middle of B/5, rests directly on one of the foundation blocks and was subsequently incorporated in the north aisle wall. A second, cut by grid line A-B/4, butts the northwest outer wall of Room A of the bath. The masonry of both is similar to that of the apse, and the latter wall fragment may mark the maximum western extension of the apsed building.

While suggestions as to the reconstruction and function of the apsed building must await further excavation and study, the date of its construction may be set, thanks to good pottery and coin finds, shortly after the middle of the sixth century.

"PRESENTATION" CHURCH PHASE

In the course of conservation and detailed investigation of the south wall of the prothesis, a wall mosaic was discovered representing the Presentation of the Christ Child in the Temple (fig. 11). The complicated context in which the mosaic was found, described briefly below, leaves no doubt that the mosaic and the segment of wall which carries it, represent the remains of an early ecclesiastical structure. Mosaic and carrying wall are, moreover, the earliest structural remains which can be associated with an ecclesiastical building on the site. Since they appear to represent a distinct phase, and are the only remains of that phase identified thus far, they have been given the provisional designation "'Presentation' Church phase."

In the First Report we described a segment of wall imbedded in the main south wall of the prothesis (incorrectly associated with the corresponding north prothesis wall); and we noted that a sounding in this segment revealed traces of mosaic decoration on the south face of the segment.⁸ This mosaic surface could be felt through the sounding hole, but not seen, and since the mosaic was sandwiched facing south between the prothesis wall segment and the main north wall of the bema, which covered its surface, any possi-

⁸ First Report, 268, with indication of location in fig. B.

bility of exposing it from the front was excluded.

Further investigation this season revealed that the plaster setting bed of the mosaic was sufficiently detached from its supporting wall to make possible the careful dismantling of the supporting wall without damage to the mosaic, thereby completely exposing the mosaic from the back. By applying a supporting cradle of wood and plaster to its back the mosaic could then be lifted out of its position intact.

The pictorial field of the mosaic measures 1.00 m. in height, and with its ornamental frame 1.30 m. Originally it was probably square. Despite the losses suffered prior to its discovery, especially in the background and along the left border, the faces and much of the bodies of the three figures are intact. Throughout the mosaic deterioration has affected, in some cases seriously, the condition of the individual glass and marble tesserae.

The scene is that version of the Presentation, or more exactly *Hypapante*, in which Symeon encounters the Christ Child, presented by the Virgin, outside the temple, the three figures being the only elements of the composition. Despite the losses in the mosaic, a careful inspection seems to rule out the original presence of either the temple portal or of other figures.⁹

The evidence for the date of the "Presentation" phase, which is complex and still inconclusive, may be summarized as follows: The phase is later than the aforementioned apsed building; that is, mid-sixth century or shortly thereafter. How much later is yet unknown, since it has not been determined whether the two phases coexisted at any time. The "Presentation" phase is earlier than the East Bema phase, since the north wall of the East Bema covers the mosaic and suppresses its structure. The date of the East Bema, discussed below, itself uncertain, is seventh century or later, on the basis of preliminary pottery evidence. And we may assume that

⁹ See the essential study of D. C. Shorr, "The Iconographical Development of the Presentation in the Temple," *Art Bulletin*, 28 (1946), 17 ff., with some emendations by K. Wessel, s.v. "Darstellung Christi im Tempel," *Reallexikon zur byzantinischen Kunst* (Stuttgart, 1966), I, col. 1134 ff.

the mosaic would not have been created between approximately 730 and 841, the effective period of Iconoclasm in Constantinople.

On the evidence of style and technique, we are inclined to date the mosaic provisionally before Iconoclasm, basing this on analogies with the mosaics of John VII in Rome.¹⁰ In the complete absence of relevant pre-Iconoclastic mosaics from Constantinople to which this may be compared,¹¹ the extreme difficulties in dating must be emphasized. On the other hand, there is nothing in the available evidence thus far which would contradict a date sometime between the last part of the sixth and the beginning of the eighth century. Confirmation of a date for the mosaic in this period would make it the only surviving pre-Iconoclastic programmatic church mosaic from Constantinople and the earliest surviving *Hypapante* representation in Byzantine art.¹²

EAST BEMA PHASE

In prior reports we distinguished the eastern part of the existing bema as a distinct phase, earlier in date than the Main Church. Further information regarding this phase was obtained this season by penetrating the flat, eastern, Turkish closing wall of the bema and by excavation in the bema floor.

Since only the stumps of the main apse are visible on the eastern exterior where the ground level is more than five meters above that of the interior, we wished to determine whether any part of the apse had survived and to establish, if possible, the date of its destruction. A passage was cut in the north end of the flat closing wall where it butts the beginning of the apse, and through this the earth fill immediately behind the closing wall could be excavated. The extent of excavation was limited here by the high exterior level. But the interior face of the semicircular apse, preserved to an average height of one meter,

¹⁰ Cf. P. J. Nordhagen, "The Mosaics of John VII (705-707 A.D.)," *Acta ad archaeologiam et artium historiam pertinentia*, 2 (1965), 121-66.

¹¹ We must discount for this purpose the mosaic fragment from the church of Hagios Nicolaos, Istanbul. Cf. Nordhagen, *op. cit.*

¹² The conservation of the mosaic has been undertaken by Mr. Ernest J. W. Hawkins.

was laid free (figs. A and 12), together with the mortar bed of the last phase of bema paving. Excavation beneath the mortar bed revealed the semicircular foundation of a synthronon (fig. A) whose context indicates that it belongs, in all probability, to the East Bema phase. While stratigraphic observations in this area were quite difficult, the erection of the Turkish closing wall of the bema could be set approximately at the beginning of the nineteenth century.

Accessibility to this area, which lies beyond the confines of the building, was preserved by building up the apse wall to a height of 3.5 m. and covering the area with a ferroconcrete ceiling. Further excavation to the east of the building is, under present circumstances, impossible.

Excavation in the bema, begun in the third season, was continued. Except where it underlies the mihrab, the Turkish marble paving was entirely raised, disclosing through further excavation the remains of three prior paving phases (fig. 13). These can tentatively be assigned to the East Bema, Main Church and Late Byzantine phases.

The lowest and earliest of these phases was laid free in a strip spanning the width of the bema between the two main eastern piers of the Main Church. From the paving is preserved the remains of a rectangular *opus sectile* panel (original dimensions 1.26 by 1.86 m.) (figs. A and 14), lying on central axis and decorated with a conventional guilloche motif consisting of a central medallion (original diameter 0.89 m.) and four polychrome rosettes (diameter 0.57 m.) in the corner spandrels.¹³ The guilloche panel was originally flanked to the north and south by simple rectangular panels, the design of which could be recovered from the impression of the marble in the paving mortar. To judge from the enframing system, the panels may have been polychrome. This paving was separated from the eastern part of the bema, by a step spanning the full width of the bema, of which traces of its *verde antico* riser survive. The guilloche system and its step were sup-

pressed by the next paving phase; and we have been unable to trace the continuation of the system east of the step.

A sounding below the guilloche paving level yielded no evidence for a lower and earlier paving. The latest pottery fragments from this sounding are seventh century in date, giving a provisional *terminus post quem* for the pavement. In this connection we should state that conclusive proof does not as yet exist for connecting the guilloche paving system to the East Bema phase. Although this is strongly suggested by its situation and axis, no trace has yet come to light of a paving level belonging to the earlier "Presentation" phase. The issue is an important one, since it has direct bearing on the date of the "Presentation" phase and its mosaic.¹⁴

Efforts to determine the nature of the western extension of the East Bema phase have met thus far with little success. A sounding below the naos pavement, directly to the east of the main northwestern naos pier, exposed a massive stone block, partially cut down to permit the paving overlay and partially immured in the rising wall of the pier (position shown in fig. A). Its context suggests that it is a survival from the East Bema phase and that it may define the northern limit of that phase. But soundings elsewhere in the naos have yielded negative results with respect to this phase. This may be explained either by the complete suppression of the western part of this phase at the time of the rebuilding of the Main Church, or by the fact that the remains of this phase are covered by Main Church structure.

ST. FRANCIS AND MELISMOS CHAPELS

In our Second Report the discussion of the St. Francis and Melismos Chapels was confined to their decoration. Further study of their structure makes it evident that the decoration of both chapels is secondary, replacing, doubtless, earlier decoration of which no trace has remained. Chronologically, the

¹³ The most convenient collection of comparative material for this and the *opus sectile* star described below is, despite its Western orientation, H. Kier, *Der mittelalterliche Schmuckfussboden* (Düsseldorf, 1970).

¹⁴ A historical consideration may be raised here regarding the date of the East Bema phase. If the "Presentation" mosaic is, in fact, pre-Iconoclastic in date, its survival of Iconoclasm may be accounted for by its having been already covered by the north wall of the East Bema before the onset of Iconoclasm (CLS).

construction of both chapels followed the East Bema phase, with the St. Francis Chapel the earlier of the two and the Melismos Chapel, in all probability, antedating the Main Church. In its primary phase, the Melismos Chapel was opened by three windows, subsequently filled at the time of the Palaeologan redecoration.

In the absence of secure dates based on coins or pottery finds, we are able for the time being to suggest only approximate general dates on the basis of masonry. That of the St. Francis Chapel has some elements in common with the masonry of the tenth-century Theotocos Church of Constantine Lips—small ashlar and brick construction with grooved pointing; the Melismos Chapel is in recessed brick technique which places it generally in the eleventh or twelfth centuries.

MAIN CHURCH

Excavation to the north of the building between it and the aqueduct was completed down to the approximate level of the naos paving in the zone east of grid line 2-3. Within the north aisle this revealed the continuation to the west of the undisturbed paving mortar bed already partly exposed in the second season.¹⁵ Where this bed was undisturbed, excavation below it continued to yield pottery fragments no later than the twelfth century in date.

Outside the aisle to the north we found evidence of a paved courtyard, with remains of the marble paving surviving in A/6 (fig. 6). The courtyard is on approximately the same level as the north aisle paving and naos, and is enclosed by the north aisle wall, by the north-south wall cut by grid line A/6-7, by the aqueduct, and by the zigzag wall in A/3-5. It probably extended to the west up to the wall which is roughly parallel to grid line 2-3. The presence of a number of simple graves of twelfth-century date in A-B/4 indicates that the courtyard was used as a cemetery.

Good evidence exists for assigning the north aisle, with its south counterpart, the courtyard, and the zigzag wall to the Main Church phase.¹⁶ In addition to the evidence

already cited for the date of this phase, numerous soundings within the building in contexts associated with the Main Church produced consistent evidence in pottery and coins for a date of construction in the twelfth century. A preliminary analysis of the coins suggests that this is to be narrowed to the last two decades of the twelfth century.

LATE BYZANTINE PHASE

Changes wrought in the building by the Byzantines, following its use by the Latin conquerors, have been described in earlier reports. Among these were the redecoration of the diaconicon and adjacent rooms and the installation of the Kyriotissa fresco over the esonarthex door.¹⁷ The aforementioned excavation in the bema yielded indications that changes may have been made here as well. The remains of prior pavings in the bema to the east of the excavated step, already referred to, showed evidence of having been churned about in the course of successive paving phases, thus limiting the possibility for clear stratigraphic observations. In this area two *opus sectile* medallions (outside diameter 1.33 m.) with six-pointed star motifs were discovered, flanking to the north and south the position where the altar probably stood (figs. A, 13, and 15). Of these two the north one is the better preserved, and both show evidence of clumsy repair. Evidence for the date of their setting is ambiguous: they may have been set or reset in the Palaeologan period, possibly reutilizing earlier material, or they may have originated in the previous Main Church phase.

TURKISH PERIOD

A discovery of interest for the early Turkish history of the building should be noted here. Let into the southeast part of the excavated main apse wall are the remains of a mihrab (position shown in fig. A), whose context suggests that it is the one installed at the time of the transformation of the building from church to mosque, and dates it, thus, from the late fifteenth or early sixteenth century.

open the possibility that the side aisles represent a later construction or reconstruction (YDK).

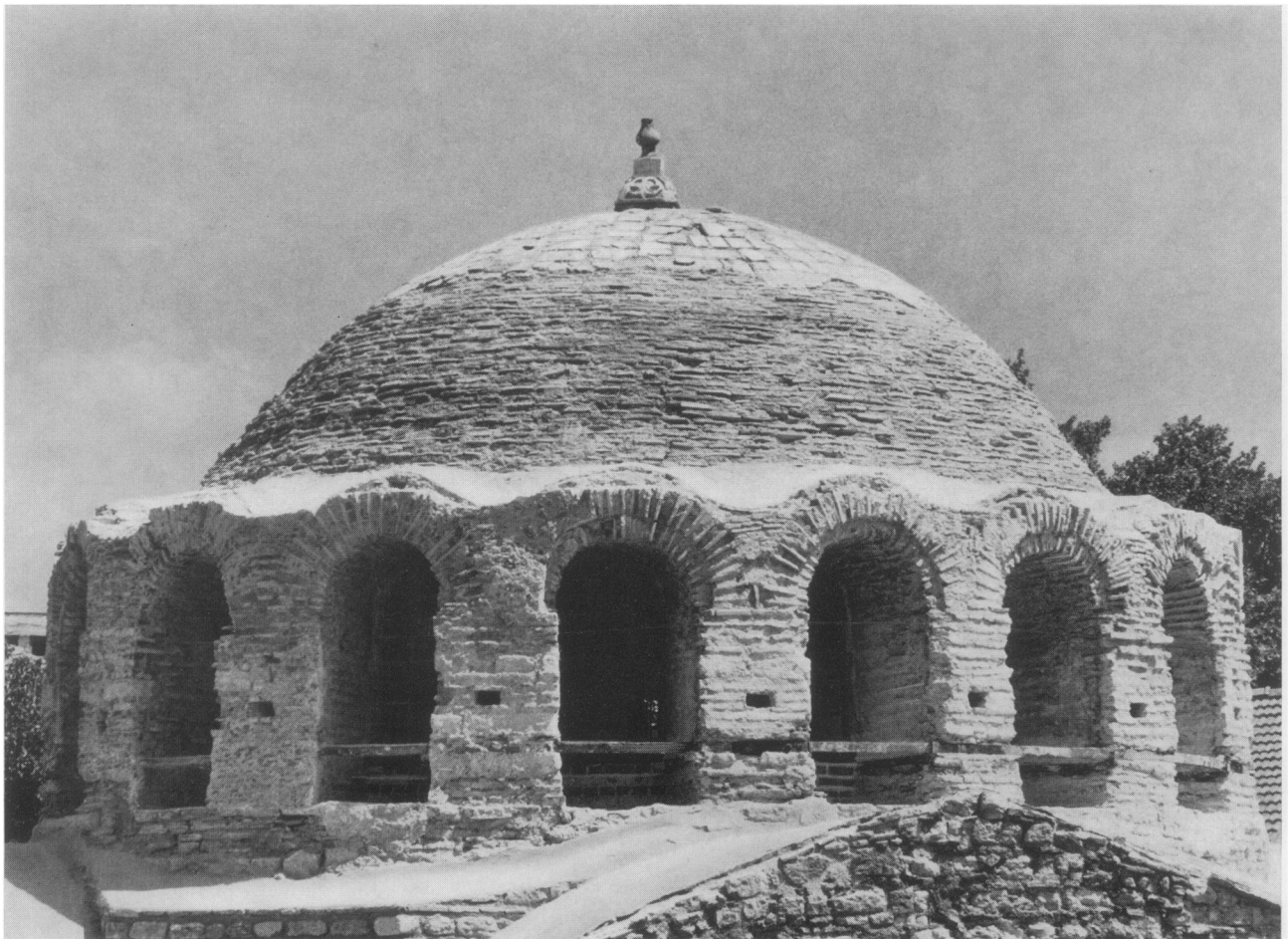
¹⁷ Second Report, *passim*.

¹⁵ Second Report, figs. 4 and 5.

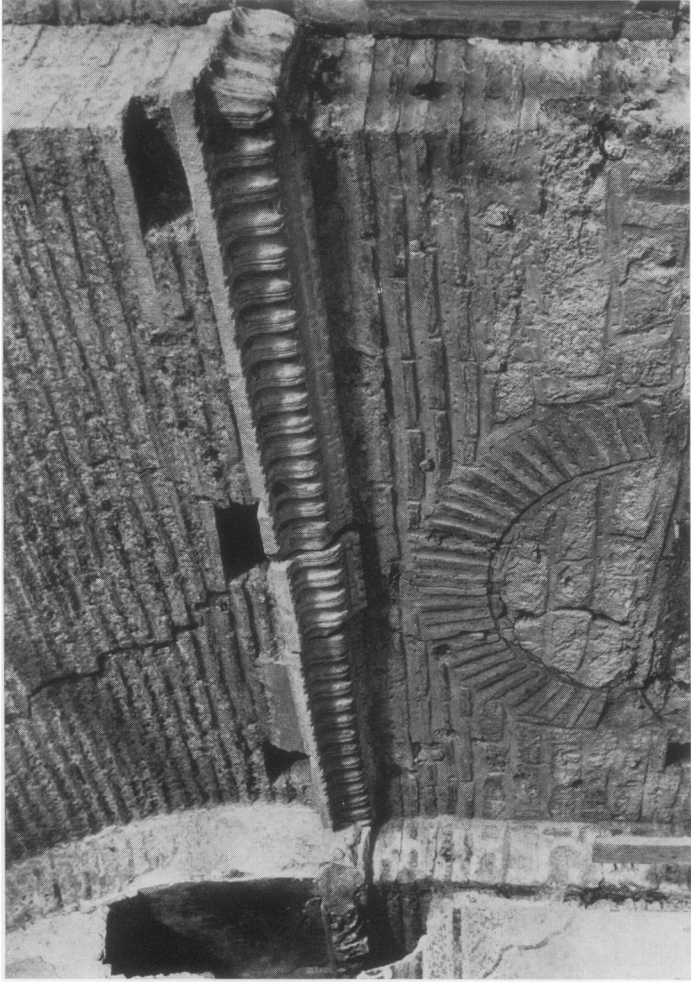
¹⁶ Despite this evidence, differences in the masonry of the side aisles from one another and from the Main Church masonry must leave



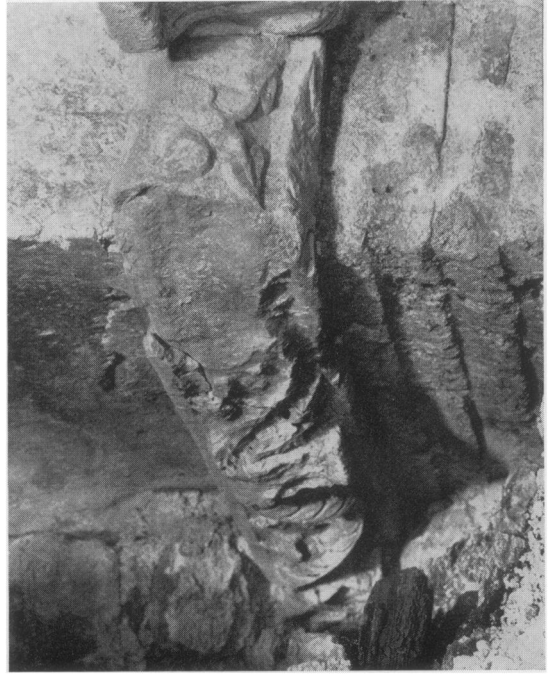
1. Fresco Fragment of Sleeping Apostle from G/6 (max.-length 36 cm.)



2. West Elevation of Drum and Dome, after Cleaning.
Kalenderhane Camii.



3. East Bema. Upper South Wall and Cornices, looking Southeast



4. East Bema. Detail of Main Apse Cornice, looking Southeast



5. Altar Mensa from Bema Paving



6. Kalenderhane Camii. General View of Excavation to North of Building, looking East



7. Late Roman Bath, Room A, looking South



10. Apsed Building, Foundation of Western Extension, looking East



8. Late Roman Bath, Room B, from above (top is North)



9. Late Roman Bath, Room B, looking West



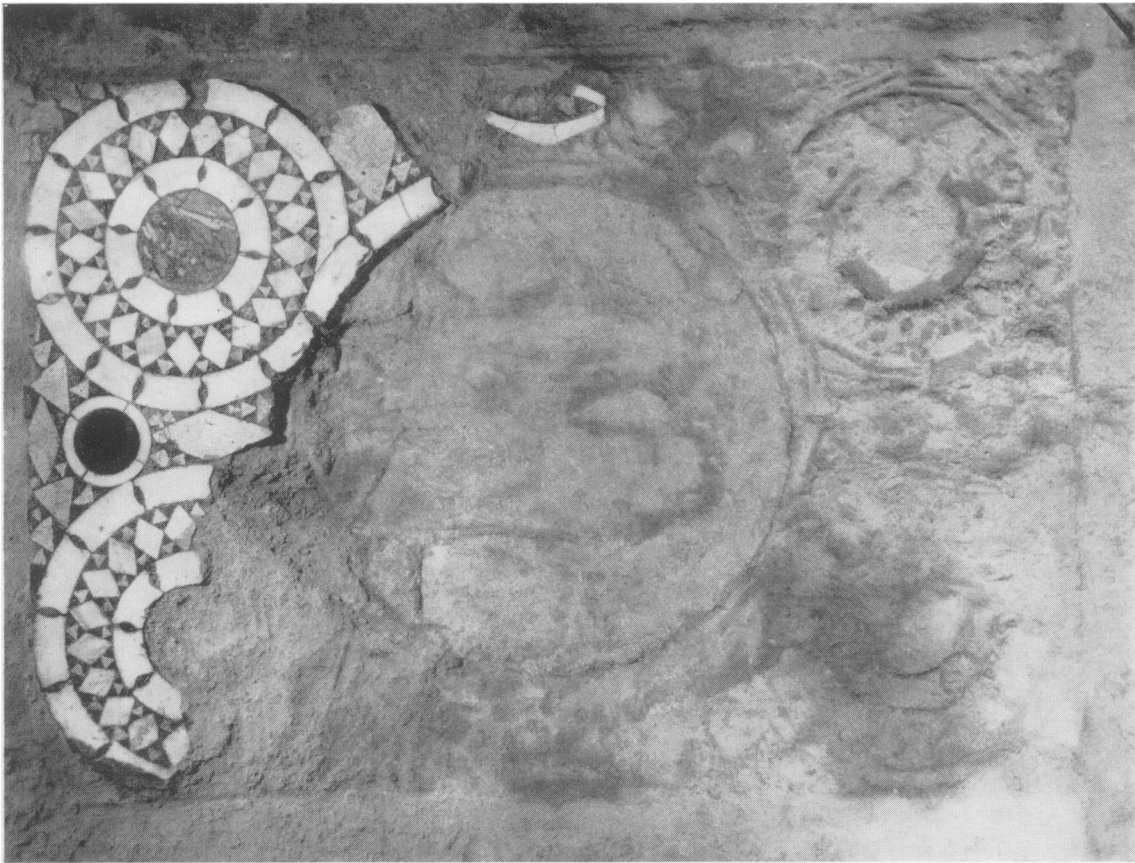
11. Mosaic of the Presentation of the Christ Child in the Temple, after First Stage of Conservation



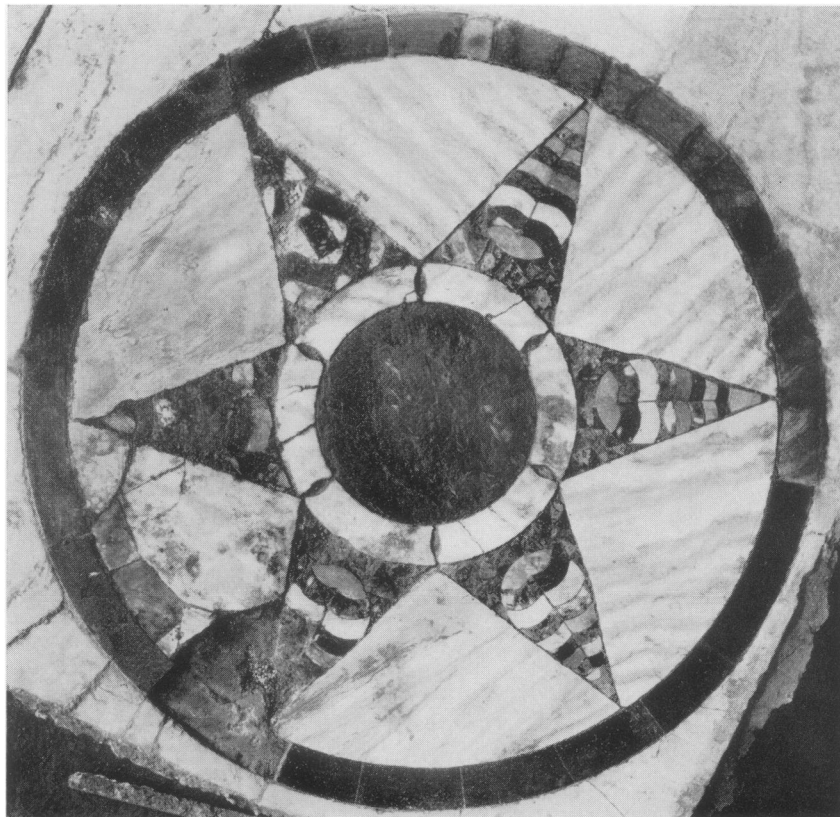
12. Main Apse behind East Closing Wall, looking North (paving joints heightened in white)



13. Bema, from above, looking South, showing Earlier Paving Phases (paving joints heightened in white)



14. Bema Paving, Remains of *opus sectile* Panel with Guilloche



15. Bema Paving, North *opus sectile* Star